# PROFESSIONALISM AND RESIDENCY REFORM*

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BEFORE I BEGIN THIS TALK, I shall briefly describe my previous experiences with the issue of residency reform. During the year I was president of the American Medical Student Association, 1987–1988, we wrote a briefing paper on residency reform, passed a resolution on residency work hour limitations at the national convention, and testified in New York State on the proposed 405 regulations.[1-4] At that time medical students were concerned about three things: commitment to education by residency program directors, the degree of ancillary support, and the impact of long hours on morale and patient care. Students asked to what degree the activities of residents were education versus service to hospitals? That question remains at the heart of the debate on residency reform here and across the country.

Unlike other speakers today, I do not practice medicine in New York State. I am a second year resident at The Johns Hopkins Hospital, an institution that has not had to respond to state regulations designed to modify radically the method and environment in which physicians are trained. My comments are directed at residency training as it exists throughout the country. The recommendations are intended to improve both the preparation of physicians and the practice of medicine.

Residents are on the front lines of medical care. Although our experiences are rewarding, they are also stressful. Hours are often long and at times counterproductive to learning. Thoughtful people throughout the country have examined residency training, and many agree on need to reform it.[5-11] The most controversial changes, precipitated by actions in New York State, concern the service component of residency and call for reducing the number of work hours and increasing supervision.[8-11] Limiting reform to these two issues does not address the educational aspects of residency. Discussion on

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changing the residency should emphasize how the hours are used and toward what goal, with the aim of making residency training a time to develop professionalism, both its skills and its values.

What is professionalism? A profession is composed of individuals and thus professionalism should be focused on the individual as well as the group. The individual remains within a group to be part of a tradition and to have standards against which individual performance can be measured. Professionalism as it relates to the group is expressed through organizations and their commitment to meet the needs of the public and patient rather than the individual practitioner, which is the purpose of a trade association.[12,13]

More specifically, the activity of a profession is primarily intellectual and depends on performance by individuals; embodies virtues of honesty, courage, justice, creativity, and duty essential to the achievement of excellence; is practical, with general agreement on the skills of the practitioner; is characterized by skills, knowledge, and values that are furthered by life-long learning; is autonomous, complex, and absorbing, and leads to the formation of collegial relationships and organizations; and receives acknowledgement of society because the profession as a whole furthers goals set for it by society.[12,13]

True professionalism therefore embodies an individual standard of excellence and a commitment to achieve excellence through behavior that is generous, honest, courageous, and creative. Furthermore, the development of professionalism should not be equated with the mere acquisition of technical skills. Nor can it be pursued with a set of competing objectives such as wealth or power. Service to society is integral to any profession.[12,13] As Flexner was keen to point out, insofar as law and medicine "are prosecuted at a mercenary or selfish level, [they] are ethically no better than trades."[12] Professionalism, therefore, incorporates the acquisition of skills as well as values that commit one to personal and societal goals.

Development of professional virtues, skills, and knowledge is a life-long process that should begin prior to entry into medical school and continue long after residency ends. Residency years are crucial to the expression and nurturance of professional qualities in part because it is, for many, the first time we assume the role and responsibility for being a physician. Since the residency years are critical to the future of medicine, it is important to evaluate this phase of training for its potential to nurture or retard the acquisition of professional values and behavior. In doing so, one must examine the conditions of residency or the stresses that inhibit the development of a profession.

Residency directors and leaders in medicine have illuminated the stresses of residency training and provided approaches to reduce or eliminate them.[5,14-23] For the sake of discussion, these stresses are grouped into four major categories: stresses related to the nature of residency, stresses related to the educational structure of residency, stresses related to perceptions about work, and stresses related to this stage of personal maturation and professional training.[14,15]

The literature on residency identifies many facets of the training experience itself that create stress. The most important aspects include sleep deprivation, long on-duty hours, loss of control over one's schedule, the large amount of "scut work," the monotonous, repetitive nature of most tasks, frequent interruptions by paging systems, information overload, and complex procedural tasks.[14-18] Sleep deprivation and long on-duty hours are consistently noted in studies on the stress of residency to have the most deleterious and pervasive impact.[6,15,16,18] Frequent interruptions to answer pages and the performance of services that could be done by ancillary and clerical staff detract from the time residents spend both talking with patients and thinking about their illnesses and treatment plans.[16,17] The most important changes to be made in reform of residency are thus a reduction of the consecutive on-duty hours, alleviation of severe sleep deprivation, and employment of ancillary and clerical personnel to handle intravenous procedures, phlebotomy, scheduling of tests, and transporting of patients.

There also are stresses in the residency related to the educational experience. These include information overload, inadequate understanding of the limitations of technology, unstructured teaching, high patient volume, scant feedback and evaluations on performance, and lack of protected time to read.[6,14,15] Together, these aspects of residency call into question the degree to which residency is designed to meet the service needs of hospitals or to educate and to prepare physicians for the future practice of medicine.[19-21] In addition, we must critically evaluate the appropriateness of the hospital as the central site for residency education.

Residency is a job and also another phase in an individual's professional development. There are stresses related to the work environment and the decisions that must be made during these three to five years. The incidence of AIDS among hospital patients continues to rise and with it concern about contracting the disease through work-related activities.[22] This fear is compounded by the lack of disability insurance in many training programs. The need to choose careers and fellowships by the middle of the second year in an

internal medicine residency is considered premature by many residents. In fact, an informal poll among the Association of Professors of Medicine showed that as many as 50% of residents feel unprepared to make career decisions at the end of internship. Most residents in internal medicine would prefer moving fellowship application into the third year of residency.[24]

In addition to these general issues related to residents' perceptions about work, women in residency training face added challenges of discrimination[25-29] and decisions about pregnancy.[25,30-35] The literature on pregnancy suggests that long on-duty hours and stressful working conditions contribute to the increased incidence of preterm labor and preeclampsia among women residents.[30-32] More important, a supportive program director and the existence of formal maternity leave policies enhances the child-bearing experiences of women.[33-35] Issues related to women in medicine increasingly will become important because the number of women in this profession remains high and because as many as 80% of them marry another physician.

Last, stresses exist because residents are entering a phase of life marked by the end of adolescence and the beginning of adulthood.[6,14,15,23] For most, residency is the "first job." Many residents get married and start families during these years. Most residents confront new financial burdens with car loans, mortgages, and repayment of student loans. Parents and grandparents continue to age, some die. All of these changes are part of life, but they are more difficult to negotiate because of the intense time demands of residency and the impact of chronic sleep deprivation.

Educators know that some element of stress improves learning and that beyond this level learning is seriously impaired. Another way to phrase this distinction is to consider the terms "eustress" and "distress." "Eustress" occurs in the setting of adaptive coping skills and adequate support systems and serves as a stimulus to learning and growth. "Distress" occurs in the absence of adequate coping skills or support.[14] The stress in residency is distress, not eustress. We face an uphill battle trying to instill the values and skills of professionalism when residents work 100 to 120 hours a week answering pages, filling in boxes, drawing bloods, transporting patients, tracking down roentgenograms, and then falling asleep in conferences.

Hours must be reduced, but other changes need to be implemented as well. The problem is not just hours, it is the failure to have a mission of what we hope to achieve educationally during residency. Without a clear objective of the goal, the service needs of the institution drive the experience. Part of the problem we face in changing residency is the tradition of using residents to meet the service needs of hospitals and then arguing that the experience is

educational.[19-21] It is not. One possible goal of residency is to use the time to prepare the resident to be a professional.

To ensure that residency is not defined only by service and that our training meets the goals of professionalism, program directors could develop a curriculum emphasizing both didactic information and clinical skills. These education goals should be achieved within the context of work-hour limitations, thus balancing service and education during residency. The didactic portion of a residency curriculum would include basic science as it relates to clinical medicine and preventive medicine. It would also include a clinical core shaped by the clinical faculty and public health experts and, in part, defined by the health needs of the population of patients served by the hospital and its house staff. Residents need to continue to develop their clinical skills, skills that should be evaluated throughout residency. Residents should also be taught those nonclinical skills—including patient education, counseling and communication techniques, ethics, information access, critical appraisal of the literature, and writing—that are useful in practice. Finally, residents need more exposure to ambulatory medicine.[36]

In addition to mastering medical skills, residents must acquire the values of professionalism, including those of putting the patient's needs first and of being responsive to the needs of society. Beyond facts and their application, medicine is also the judgment, art, and values that can be learned from mentors and role models.[36]

A critical component of the education process should be mentoring—a commitment by the faculty of energy and time to the professional growth of junior colleagues. Mentoring is a one-on-one responsibility that provides greater support and thus assists students and residents in reaching for higher levels of achievement. It also requires a more involved commitment to the long-term career of a student or resident. With the pressure to choose career paths early, residents would benefit from active encouragement, support, and guidance by the faculty through mentoring relationships. In addition, mentoring furthers the profession's interests by fostering collegial relationships.[36]

Role models also help residents to develop professional values and demeanor. We most respect the physicians who combine the rigors of a scientific approach to patient care with a deep abiding respect for the patient as a person. In the normal rhythm and bustle of the day, it is those moments when an attending physician takes the time to discuss a patient or to review pertinent physical findings with a resident that enrich the learning experience. In this setting, master clinicians play an essential role in educating residents; from these physicians we learn clinical judgment and the art of balancing

technology and science with humanism and compassion. To safeguard the art of medicine and its passage to future physicians, program directors could identify master clinician-teachers and pay them to teach both on the wards and in the clinics.[36] As this relates to changes in New York State, use these master clinicians when providing the increased supervision now required by the 405 regulations.

An integral part of professionalism is service to society. Medical education and residency, however, does not train physicians to take the larger society into account. To help reinforce this value, residency directors could encourage the house staff to participate in the community and in organizations that are committed to larger societal goals. As residents reach out into the community through health-related projects, we also learn how to apply the principles of preventive medicine and public health and learn skills in patient education.[36]

For medicine to be a profession, we must commit to developing the values, knowledge, and skills of the professional during each phase of medical education. My primary recommendation is that we focus on professionalism as a way to identify what is important and thus how to change the residency experience so that it facilitates learning how best to serve both our patients and our society.

To begin the process, first, discuss the principles of professionalism with residents and medical students. Second, create an educational environment by decreasing the on-duty hours, increasing ancillary support, and hiring master clinicians to teach. With regard to ancillary support, if an activity such as phlebotomy, scheduling tests, transporting patients, drawing blood cultures, and putting in intravenous lines is not educational, then do not rely on residents primarily to do it. Residents need to be freed from these tasks to care for patients and to learn the ever-expanding knowledge of medicine. Third, establish a curriculum based on diseases occurring among the population of patients served by individual hospitals, emphasizing preventive and acute medicine, as well as the educational needs of the generalist. Include in the educational program skills development in literature review, writing, communication and counseling techniques, ethics, and an evaluation mechanism to assess residents' clinical competency.

In closing, I was asked to discuss the potential for "organized medicine" to effect change and to take the lead in the residency reform effort. There are hopeful signs. The Residency Review Committee for Internal Medicine adopted the 80-hour work week and one day off in seven as part of its special requirements as well as the requirement for 25% of residency to be spent in

ambulatory care settings. These changes became effective in October 1990. In addition, there is discussion on incorporating an educational curriculum around the needs of the generalist into the special requirements that would then be mandatory for all residency programs in internal medicine.

These changes truly signify a recognition that residency should be an educational experience that appropriately prepares physicians for future practice of medicine. Furthermore, the Residency Review Committee for Internal Medicine should be commended for this effort. For the Committee to be effective, however, it must be willing to apply sanctions to those programs that do not comply with the special requirements, be they related to humanism, ambulatory care, or limitations of on-duty hours.

The less than hopeful signs come from the profession as a whole. The American Board of Medical Specialties, under pressure from the surgeons, recently vetoed the Accreditation Council on Graduate Medical Education's proposal for an 80-hour work week and one day off in seven to be incorporated into the ACGME's general requirements.[37-39] The ACGME proposal was tabled recently at the Council of Medical Specialty Societies meeting to be voted on in the Spring of 1991. To date, three of five of the ACGME's parent organizations have voted in favor of adopting the proposal, one vetoed it, and one tabled it.

Unfortunately, this action by the American Board of Medical Specialties occurred in the context of department chairs' and program directors' slow if not absent attention to the appropriate mix of education and service during residency and not making this training period relevant to changes in the practice environment. Furthermore, frustration is mounting within groups who have spent the last three and a half years working with "organized medicine" to effect change. Responding to pressure from the Resident Physicians Section, the American Medical Association in December 1990 voted to apply increased pressure within the Accreditation Council for Graduate Medical Education for adoption of work hour reforms by September 1991, and, if unsuccessful, to use existing AMA policy as a guideline in working with state medical societies on pending and future legislation affecting total residency work hours, conditions, and supervision.[40]

I personally believe that residency reform should occur within and by medicine itself. For medicine to be and act like a profession, the leadership must address the issues of residency reform with a commitment to change the training experience. Anything less will be a forfeiture of medicine's professional responsibility to both its future physicians and, more important, the public.

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